

Executable Planning Results



Build a potted tree with azalea flowers.

Here is my planning for a potted tree with...



Reference Image Spatial Understanding



Spatial Understanding



Executable Spatial Plan Generation



Failure Cases

The blueprint matrix is:

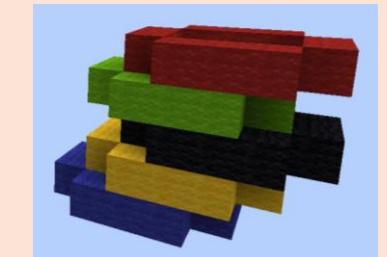
1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30
,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52.....

(LLava-Onevision-0.5B)

Repetition & Confusion

Spatial Misunderstanding

Build an Olympics Rings sculpt.



(Claude-3.5-Sonnet)

Implementation Gap

Build a small cow statue.

Planning Reasons:

To construct a small cow statue, we need to consider the shape and size of a cow. We will use the 'gray_terracotta' block for the body, 'white_terracotta' for the head, and 'light_gray_terracotta' for the legs and tail. The structure will be symmetrical with a slight asymmetry for the legs and tail to give it a more realistic appearance.

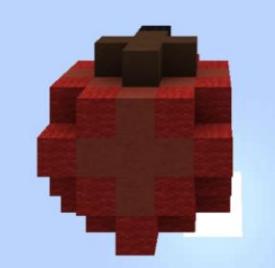


(Qwen2.5VL-7B)



Build an apple.

Creativity



(GPT-4o)

Let's build an apple using the given block materials, focusing on creating a recognizable shape.

Block Combinations: 1) Red wool and red terracotta for the body to provide texture. 2) Brown terracotta for the stem. 3) Occasional use of black wool for depth.

Outline of Structure: An apple is generally spherical but with a slightly pointed bottom and a shorter top where the stem will be placed. The structure should have a spherical shape with irregularities to create a natural look.

Creative Use of Blocks: 1) Use a combination of red wool and red terracotta to create texture differentiating parts of the apple. 2) Place brown terracotta for the stem in the center of the top layer.

Here is my executable blueprint matrix: ...